

SOME BEES FROM NEW BRUNSWICK, WITH DESCRIPTION OF A NEW SPECIES OF *HERIADES*.

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While collecting Ichneumonoidea in New Brunswick, Mr. A. Gordon Leavitt also collected a number of other Hymenoptera, and below is given a report on most of the Apoidea. Some of the material, mostly Megachilinae, Sphecodes and male Halictus, has not been identified, and is not included. A few of the determinations were made by Mr. H. L. Viereck, and credit is given in the proper places.

Owing to our scanty knowledge of the bees of Canada in general, the exact dates, sexes and number of individuals determined have been recorded.

*Bombus fervidus* Fabricus.

Nerepis, July 19, 22, two females; July 19, 22, 24, Aug. 22, five workers; Aug. 19, two males.

St. John, July 14, two females; July 14, 18, Sept. 23, three workers; Sept. 23, one male.

Red Head, St. John, Sept. 1, five workers, one male.

*Bombus ternarius* Say.

St. John, July 14, one female; Sept. 23, two workers; Aug. 19, Sept. 23, three males.

Nerepis, Aug. 18, 19, 22, Sept. 8, 9, twenty-seven workers.

Douglas Harbor, Grand Lake, Aug. 14, one worker.

Red Head, St. John, Sept. 1, one worker.

*Bombus terricola* Kirby.

St. John, Oct. 3, one female; July 14, one worker; Sept. 23, one male.

Nerepis, July 24, Aug. 18, 19, five workers; Aug. 18, one male.

Red Head, St. John, Sept. 1, one worker.

*Bombus vagans* Smith.

St. John, July 14, one female; Oct. 3, one worker; Sept. 23, to Oct. 3, three males

Nerepis, July 22, one female; Aug. 18, 19, Sept. 9, five workers; Sept. 8, one male.

*Psithyrus ashtoni* Cresson.

St. John, Oct. 2, one male.

Red Head, St. John, Sept. 1, one male.

*Psithyrus insularis* Smith.

St. John, Oct. 3, one female.

Nerepis, July 19, Sept. 8, two females.

Red Head, St. John, Sept. 1, one female.

*Psithyrus laboriosus* Fabricius.

Nerepis, Aug. 18, 19, Sept. 9, five males.

*Clisodon terminalis* Cresson.

Nerepis, Aug. 19, one female.

*Stelis foederalis* Cresson.

Nerepis, July 18, Aug. 18, two females.

*Macropis morsei* Robertson.

Nerepis, July 24, Aug. 19, six males; July 24, two females.

*Alcidamea producta* Cresson.

Nerepis, July 18, 22, two males; July 18, 24, Aug. 18, 20, 22, seven females.

*Heriades carinatum* Cresson.

Nerepis, Aug. 19, one male; Aug. 22, one female.

St. John, Sept. 9, one female.

*Heriades leavitti*, new species.

Male.—Length, about 5 mm. Black, with white pubescence, head and thorax closely and very coarsely punctured; face rugoso-punctate, the sides of face and clypeus almost concealed by the pubescence; second joint of antennæ subquadrate, the third, along its shortest side, not as long as broad; antennæ beneath dull reddish; wings brown; legs dark, obscurely reddish; abdomen coarsely and closely punctured, the punctures finer than those on thorax; the punctures on segments 1-3 hardly half a puncture width apart; segment four apically and 5 and 6 rugoso-punctured; 1st ventral segment elongate, medially at apex pointed, at base without a median elevation.

Habitat: Nerepis, New Brunswick.

Described from two specimens collected Aug. 22, by Mr. A. Gordon Leavitt, after whom it is named.

Type Cat. No. 16069 U. S. N. M.

This species resembles *H. carinatum*, but is smaller; lacks the projection at the base of the first ventral segment, has this sclerite elongate instead of short and truncate at apex medially, and has the first three dorsal abdominal segments more closely punctured, etc.

*Osmia atriventris* Cresson.

Nerepis, Aug. 18, 20, 22, seven females.

*Osmia melanotricha* Lovell & Cockerell.

Nerepis, Aug. 20, 22, four females.

As represented by this series, in this region the present species is larger than the preceding.

*Megachile infragilis* Cresson.

Nerepis, July 19, one female. Det. by Mr. Viereck.

*Megachile melanophæa* Smith.

Nerepis, July 19, 22, Aug. 18, 22, fifteen males. Det. by Mr. Viereck.

*Megachile vidua* Smith.

Nerepis, July 19, 22, Aug. 22, five females; July 22, one male.  
St. John, July 14, four females; July 14, one male. Det. by Mr. Viereck.

*Perdita octomaculata* Say.

St. John, Sept. 9, one female.

*Panurginus asteris* Robertson.

St. John, Sept. 9, three males; Sept. 8, 9, ten females.  
Nerepis, Aug. 18, 19, 22, twenty males; Aug. 18, Sept. 8, four females. Det. by Mr. Viereck.

*Calliopsis andreniformis* Smith.

Nerepis, Aug. 20, 22, four females; July 24, Aug. 20, 22, five males.

*Augochlora confusa* Robertson.

Nerepis, July 24, Aug. 19, two females; Aug. 22, one male.  
St. John, Sept. 9, six females; Sept. 8, 9, four males.

*Halictus albipennis* Robertson.

St. John, Sept. 9, three females.  
Nerepis, July 22, one female.

*Halictus arcuatus parisis* Lovell.

St. John, Sept. 8, two females; Sept. 8, 9, 18, twenty males.  
Nerepis, Sept. 9, one female; Sept. 8, 9, six males.

*Halictus coriaceus* Smith.

St. John, Sept. 9, Oct. 3, two males.  
Nerepis, Sept. 8, one female; Sept. 8, 9, four males.

*Halictus craterus* Lovell.

Nerepis, July 18, Aug. 18, 19, three females; Aug. 19, one male.  
 St. John, July 14, Sept. 8, 15, 18; Oct. 3, six females; Sept. 8, 9, 18, Oct. 2, 3, ten males.

*Halictus cressoni* Robertson.

St. John, Sept. 9, Oct. 3, two females; Sept. 9, one male.  
 Nerepis, July 18, one female.

*Halictus lerouxii* Lepelletier.

St. John, Sept. 8, Oct. 3, two males.  
 Nerepis, Aug. 18, one male

*Halictus oblongus* Lovell.

St. John, July 18, Sept. 8, 15, Oct. 3, six females.  
 Nerepis, July 22, Aug. 19, two females.

*Halictus pilosus leucomus* Lovell.

St. John, Sept. 8, one female.  
 Nerepis, July 22, Aug. 19, two females; Aug. 18, three males.

*Halictus provancheri* Dalla Torre.

St. John, Sept. 8, 9, nineteen females; Sept. 8, 9, five males.  
 Nerepis, July 18, Aug. 18, three females; July 22, Aug. 18, 20, 22, ten males.

*Halictus versans* Lovell.

St. John, July 14, 18, seven females.  
 Nerepis, Aug. 19, one female.

*Andrena canadensis* Dalla Torre.

Nerepis, Sept. 8, 9, two females. Det. by Mr. Viereck.

*Andrena cratægi* Robertson.

Nerepis, July 22, 24, three females. Det. by Mr. Viereck.

*Prosopis basalis* Smith.

Nerepis, Aug. 18, one female.

*Prosopis cressoni* Cockerell.

St. John, Sept. 8, one male.

*Prosopis modestus* Say.

With yellow spots on collar: St. John, July 18, two males.  
 Nerepis, July 22, two males.  
 Without yellow on collar: St. John, July 14, 18, six males.  
 Nerepis, July 11, 22, 24, Aug. 18, nine males.

*Prosopis varifrons* Cresson.

St. John, July 18, two males.

Nerepis, Aug. 18, 19, two females.

*Prosopis ziziae* Robertson.

Nerepis, July 22, Aug. 19, two males.

## THREE NEW NORTH AMERICAN DIPTERA.

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*Chatoneurophora macateei*, new species.

Male: Black, shining, but not glossy. Palpi and legs more or less brownish. Halteres black.

Frons about one and two-thirds as wide as its length at centre; lower row of bristles convex; surface with numerous short hairs; antennæ normal; proboscis normal; palpi of moderate size, numerous bristled; one large downwardly directed bristle on posterior margin of cheek, besides the numerous smaller cheek bristles. Mesonotum with one pair of dorso-centrals; scutellum with four equal sized bristles. Second and fifth segments of abdomen elongated; hypopygium large, knob-like, anal protuberance slightly projecting, with several short bristles. Legs strong; fore tibia with one strong bristle at about middle, mid tibia with two at before basal third, one antero-dorsal and one almost dorsal, and one anterior bristle at near apex; hind tibia with one dorsal bristle at about one-third from base, one antero-dorsal at about same distance from base, and an antero-dorsal one at near to apex. Wings clear, veins yellowish; third vein bristled to fork; fork of third vein acute; first costal division equal to 2-3 together; fourth vein leaving at beyond fork of third with a decided curve.

Length, 4 mm.

Locality: Plummer's Island, Maryland, April 23, 1913 (A. K. Fisher), one specimen.

Near to *curvinervis* Becker, but differing in the bristling of the hind tibia and some minor particulars.

Female similar to male, except in form of abdomen. The sixth segment in this sex is distinctly the longest and the apex of abdomen is rather pointed. Same data as male.

This species is dedicated to W. L. Macatee of the Bureau of Biological Survey, in whose collection the types are.